



SAR Test exclusion documentation according to FCC KDB 447498

Report identification number: 1-5107/22-01-05 Exclusion (FCC)

contains the module with the following certification numbers	
FCC ID	T7V1780
Applicant	Panasonic Industrial Devices Europe GmbH

This report is electronically signed and valid without handwriting signature. For verification of the electronic signatures, the public keys can be requested at the testing laboratory.

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EUT technologies:

Technologies:	Max. measured conducted: (AVG)	Max. gain:	Min. pathloss:
Bluetooth LE	7.81 dBm	1.4 dBi	0 dB (if applicable)
ZigBee IEEE 802.15.4	6.90 dBm	1.4 dBi	0 dB (if applicable)

NOTE:

Bluetooth LE test results see CTC advanced test report 1-3308/21-01-06

Max. Peak conducted measured: 7.81dBm (2450 MHz)

ZigBee IEEE 802.15.4 test results see CTC advanced test report 1-1635/20-01-05 (cond.) and 1-5107/22-01-04 (rad.)

Max. Peak conducted measured: 6.9 dBm (2475 MHz)

SAR test exclusion according to KDB447498 (General RF Exposure Guidance v06)

Equation from Chapter 4.3.1: Standalone SAR test exclusion considerations page 11 and ff.

(1) Standalone SAR test exclusion for 100 MHz to 6 GHz at test separation distances $\leq 50\text{mm}$

$$(\text{Threshold}_{1\text{-g};10\text{-g}}) \times d_{\text{separation}} / f^{0.5}$$

where

$\text{Threshold}_{1\text{-g};10\text{-g}}$ is 3 for 1-g; 7.5 for 10-g

$d_{\text{separation}}$ is the min. test separation distance; 5mm is used if the distance is less

f is the RF channel transmit frequency

The table below gives the calculated maximal power that could be used for source based time averaged conducted or radiated power, adjusted for tune up tolerance. If this is at or below the calculated value the DUT is exempted from SAR evaluation.

Technology:	frequency [MHz]	$d_{\text{separation}}$ [mm]	$\text{Threshold}_{1\text{-g}}$	Powerlimit [mW]	$P_{\text{max-declared}}$		Exclusion
					[dBm]	[mW]	
ZigBee	2475.00	5	3	9.53	6.90	4.90	yes
BT LE	2450.00	5	3	9.58	7.81	6.04	yes